

Type Specimens of Plants Described by Miquel in *Lespedeza* Section Macrolespedeza (Leguminosae)

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The collections of *Lespedeza* sect. Macrolespedeza of Siebold and his successors in the Rijksherbarium, Leiden, were examined. The identity of the specimens is clarified and lectotypes for *L. buergeri* Miq. and *L. cyrtobotrya* Miq. are here designated. The lectotype of *L. sieboldii* Miq. and the holotypes of *L. oldhamii* Miq. and *L. bicolor* Turcz. var. *pauciflora* Miq. are confirmed.

Key words: Holotype, lectotype, *Lespedeza*, sect. Macrolespedeza, typification.

Lespedeza sect. Macrolespedeza is diverse in Japan. Miquel (1867), the first taxonomist to recognize species in *Lespedeza* sect. Macrolespedeza based on a modern concept, described four species (*L. buergeri*, *L. cyrtobotrya*, *L. sieboldii*, *L. oldhamii*) and two infraspecific taxa (*L. bicolor* f. *microphylla*, *L. bicolor* var. *pauciflora*), mainly based on the collections of Siebold and his successors preserved in the Rijksherbarium, Leiden (L). He cited collections for each taxon, but, as was usual at the time, did not designate types for any of the taxa he described. It is therefore necessary to select lectotypes for Miquel's names to stabilize their application and usage.

In 1983 and 2001, we examined specimens of *Lespedeza* sect. Macrolespedeza collected by Siebold and his successors preserved in the Rijksherbarium, Leiden (L). When Akiyama (1988) revised sect Macrolespedeza, she refrained from designating lectotypes for some taxa because she had not examined all the collections studied by

Miquel. In 2001 Ohba visited Leiden and examined all the collections of sect. Macrolespedeza and borrowed some critical specimens for further study.

In this article we cite the collections on which Miquel's new taxa of sect. Macrolespedeza were based and designate lectotypes for stabilizing their names.

Lespedeza buergeri Miq.

Miquel (1867) cited four specimens in the original description as "SIEBOLD ad littus maris, nec non in insula Inosima, BUERGER aliis locis, OLDHAM prope Nangasaki legerunt." We found seven unique sheets with labels with the heading "Herb. Lugd.-Batav." and "*Lespedeza Buergeri*" in Miquel's hand and one duplicate. Through Miquel's handwriting we determined that Miquel recognized these specimens to be *Lespedeza buergeri* (Table 1).

Two sheets (nos. 908.118-1368 and 908.118-1370) have a label with the handwritten "Siebold" by Miquel. Miquel appar-

ently recognized these specimens as ones collected by Siebold. No. 908.118-1368 has an additional label with the handwritten “*Hedysarum ad littus maris ...*” We consider this label to be the original one written by Siebold. The sheet corresponds with one of the specimens cited by Miquel, “SIEBOLD ad littus maris.” Akiyama (1988) considered this to be a syntype, and we agree with her opinion. No. 908.118-1370 has another label with the handwritten “*Hedysarum spec. 2 Lespedeza*. Kihagi in insul. Iwosima lectum” and additional handwriting in Japanese. We believe this label to be an original one and the “*Lespedeza. Kihagi*” is presumed to have been written by Keisuke Ito. The handwriting in Japanese [“Kihagi” on the left, and “Hagimodoki” and “Koshikuwa no hitoshina (or ippin or ichihin)” on the right] is presumed to be written by another Japanese person. There is an island southwest of Nagasaki now called “Io-jima.” “Iwosima” may be the same as “Io-jima.” Miquel cited one specimen collected by Siebold “in insula Inosima.” In Leiden we could find no specimen collected by Siebold “in insula Inosima.” The handwriting is sometimes difficult to read. We believe Miquel erroneously cited the locality as “Inosima” instead of “Iwosima.” We consider this specimen to be the one cited by Miquel, “SIEBOLD... nec non in insula Inosima.” Akiyama (1988) considered this to be a syntype, with which we agree.

No. 951341 700 has Miquel’s label with the handwritten “S” by Miquel, which we consider to mean “Siebold,” and as such to have been collected by Siebold in Japan. This sheet has no indication of the locality. As mentioned above, Miquel cited specimens collected by Siebold as “ad littus maris” and “nec non in insula Inosima.” We therefore do not recognize this sheet to be a syntype even though it has Miquel’s handwritten “*Lespedeza Buergeri*.”

Four sheets (nos. 908.118-1369, 908.118-

1388, 951.326 132, 951.326 152) have Miquel’s label with the handwritten “Buerger” by Miquel, indicating that Miquel recognized these specimens to be collected by Buerger. These sheets correspond with the specimens cited by Miquel; “BUERGER aliis locis.” No. 951.326 358 without Miquel’s handwritten is a duplicate sheet of no. 951.326 132 and regarded as an isosyntype.

Miquel cited an Oldham collection, “OLDHAM prope Nangasaki legerunt,” but we did not locate a specimen collected by Oldham and determined by Miquel as “*Lespedeza Buergeri*”

In conclusion, we confirm the existence of six syntypes and one isosyntype of *L. buergeri* in Leiden. We examined them in detail and identified all of them as *L. buergeri*. Although we were unable to locate the syntype collected by Oldham at Nagasaki (“Nangasaki”), we designate a lectotype here. *Lespedeza buergeri* is named after Buerger, so we select the Buerger specimen (no. 951.326 132) as the lectotype. The specimen is fine and well agrees with Miquel’s description.

Lectotype: Japan. (no locality indicated) (Buerger s. n., L, no. 951.326 132; L, no. 951.326 358-iso). [Fig. 1]

Syntypes: Japan. In insula Iwosima, ut ‘Inosima’ [now probably Io-jima] (Siebold s. n., L, no. 908.118-1370); Ad littus maris (Siebold s. n., L, no. 908.118-1368); (no locality name) (Buerger s. n., L, nos. 908.118-1369, 908.118-1388, and 951.326 152); Nangasaki [now Nagasaki] (Oldham s. n., L, not seen).

Japanese name: Ki-hagi. The name “Kihagi” on a syntype specimen makes clear that the use of “Kihagi” in the Edo era is the same as now. “Hagi-modoki,” “Koshikuwa no hitoshina (or ippin or ichihin)” and “Iwa-hagi (see specimen no. 908.118-2392) also are on the label, but those names are no longer used. They may have been local ver-

Table 1. Specimens determined by Miquel

Miquel's determination	Accession number of Leiden	Status of type	Collector's on Miquel's label	Original notes	Schindler's determination	Akiyama (1988)	Present study
<i>Lespedeza Buergeri</i>	908.118-1368	Syntype	Siebold	<i>Hedysarum</i> ad littus maris ...	<i>L. buergeri</i>	<i>L. buergeri</i>	<i>L. buergeri</i>
<i>Lespedeza Buergeri</i>	908.118-1370	Syntype	Siebold	<i>Hedysarum</i> spec. 2 <i>Lespedeza</i> . Kihagi in insul. Iwosima lectum キハギ ハギモドキ コシクワノ一品	<i>L. buergeri</i>	<i>L. buergeri</i>	<i>L. buergeri</i>
<i>Lespedeza Buergeri</i>	951.341.700		S				<i>L. buergeri</i>
<i>Lespedeza Buergeri</i>	908.118-1369	Syntype	Buerger				<i>L. buergeri</i>
<i>Lespedeza Buergeri</i>	908.118-1388	Syntype	Buerger	<i>Lespedeza racemosa</i>			<i>L. buergeri</i>
<i>Lespedeza Buergeri</i>	951.326.132	Lectotype (Syntype)	Buerger			<i>L. buergeri</i>	<i>L. buergeri</i>
<i>Lespedeza Buergeri</i>	951.326.152	Syntype	Buerger				<i>L. buergeri</i>
<i>Lespedeza cyrtobotrya</i>	908.118-1365	Lectotype (Syntype)	B	<i>Hedysarum sericeum</i> Th. Iwajajama Octob. ミツバハギ ハギモドキ	<i>L. cyrtobotrya</i>	<i>L. cyrtobotrya</i>	<i>L. cyrtobotrya</i>
<i>Lespedeza cyrtobotrya</i>	908.118-1367	Syntype	Siebold	<i>Hedysarum</i> (<i>Lespedeza</i>) <i>racemosa</i> [sic], Th. fl. Var. flor. alb. Sitzyma	<i>L. cyrtobotrya</i>		<i>L. cyrtobotrya</i> <i>L. homoloba</i>
<i>Lespedeza cyrtobotrya?</i>	908.118-1377	Syntype	Sieb	Sitzyma October	<i>L. formosa</i> var. <i>albiflora</i>		<i>L. homoloba</i>
<i>Lespedeza cyrtobotrya</i>	908.118-1387	Syntype	Oldham	<i>Lespedeza virgata?</i> DC. Japan Oldham 1861	<i>L. buergeri</i>		<i>L. × cyrto-buergeri</i>
<i>Lespedeza cyrtobotrya</i>	944.161-355		Siebold	<i>Hedysarum</i> Octob.			<i>L. cyrtobotrya</i>
<i>Lespedeza cyrtobotrya</i>	944.161-356		Siebold				<i>L. cyrtobotrya</i>
<i>Lespedeza cyrtobotrya</i>	951.342-263		Siebold				<i>L. cyrtobotrya</i>
<i>Lespedeza Sieboldii</i>	908.118-2353	Syntype	Thunberg?	Thunberg <i>Hedysarum racemosum</i> Thunb. japon. 285 <i>Desmod. racemosum</i> DC. 115 ē Japan...	<i>L. formosa</i>	<i>L. thunbergii</i>	<i>L. thunbergii</i>

<i>Lespedeza Sieboldi</i>	908.118-2346	Syntype	Siebold	<i>Hedysarum racemosum</i> Th. ハギ コシクワ		<i>L. thunbergii</i>	
<i>Lespedeza Sieboldi</i>	908.118-2356	Syntype	Siebold	<i>Lespedeza hirotua</i> Fl. albioc Th. <i>Hedysar.</i> Linn. -- Culta in H. B. ハギ コシクワ 宮城野の萩 春秋二度花あり	<i>L. formosa</i>	<i>L. thunbergii</i>	<i>L. thunbergii</i>
<i>Lespedeza Sieboldi</i>	908.118-2363	Syntype	Siebold			<i>L. thunbergii</i>	
<i>Lespedeza Sieboldi</i>	908.118-2371	Syntype	Siebold			<i>L. thunbergii</i>	
<i>Lespedeza Sieboldi</i>	908.118-2381	Syntype	Siebold	<i>Hedysarum heterocarpon</i>		<i>L. thunbergii</i>	
<i>Lespedeza Sieboldi</i>	908.118-2391	Lectotype (Syntype)	Siebold	<i>Hedysarum racemosum</i> Th. Varietas culta *Kosi Kuwa **Fagi <i>Japonia</i> Siebold *コシクワ **ハギ Herb Lugd. Batav. <i>Lespedeza racemosa</i> <i>Desmodium racemosum</i> Dec <i>Hedysarum racemosum</i> Thb. Herb. v. Siebold"	<i>L. formosa</i> var. <i>albiflora</i>	<i>L. thunbergii</i>	<i>L. thunbergii</i>
<i>Lespedeza Sieboldi</i>	908.118-2392	Syntype	Buerger		<i>L. formosa</i>	<i>L. thunbergii</i>	<i>L. thunbergii</i>
<i>Lespedeza Sieboldi</i>	908.118-2341	Syntype	Textor	Nomen japonicum ハギ = Fagi <i>Japonia</i> Coll. Textor			<i>L. buergeri</i>
<i>Lespedeza Sieboldi</i>	908.118-2351	Syntype	Textor				<i>L. buergeri</i>
<i>Lespedeza Sieboldi</i>	908.118-2361	Syntype	Textor	Nomen japonicum イワハギ = Iwa fagi <i>Japonia</i> Textor 花七八月	<i>L. buergeri</i>	<i>L. buergeri</i>	<i>L. buergeri</i>
<i>Lespedeza Sieboldi</i>	without no.	Syntype	Oldham	332 <i>Lespedeza</i> Oldham Japan & Korea Arch coll. 1862-63	<i>L. formosa</i>		<i>L. japonica</i> <i>L. thunbergii</i>
<i>Lespedeza a... L. Sieboldi?</i>	908.119-583	Syntype	Oldham	333 <i>Lespedeza</i> Oldham Japan & Korean Arch. coll. 1862-63	<i>L. buergeri</i>	<i>L. maximowiczii</i>	<i>L. maximowiczii</i>

nacular names for the former.

Lespedeza cyrtobotrya Miq.

Miquel (1867) cited three specimens in the original description as "Prope Iwajagama et in Sitzigama legit SIEBOLD; prope Nangasaki OLDHAM (*L. virgata?* Oliver *in shed.*)."
Miquel also cited the specimen (Oldham 329) in a note as "*Observ.* No. 329 *herb.* OLDHAM specimen imperfectum, cum *L. bicolor* vel *L. Sieboldii* conferendum."

We found seven sheets with the label heading "Herb. Lugd.-Batav." and the handwritten "*Lespedeza cyrtobotrya*" by Miquel, which indicate to us that they were all recognized by Miquel to be *Lespedeza cyrtobotrya* (Table 1).

No. 908.118-1365 has Miquel's label with the handwritten "B" by Miquel. We consider "B" to mean "Buerger" and that Miquel believed this specimen to be collected by Buerger. This sheet has two other labels on lower left side; one label with the handwritten "*Hedysarum sericeum* Th." and handwriting in Japanese "Mitsubahagi" and "Hagimodoki," probably by Kaku or Keisuke Ito, and another label with the handwritten "Iwajajama Octob.," probably by Buerger. Since it has the label, "*Hedysarum sericeum* Th." and the Japanese words, "Mitusbahagi" and "Hagimodoki," it is considered to be Siebold's collection. Another label with "Iwajajama Octob." is regarded to be collected by Buerger. In Leiden there is only one specimen collected at Iwajajama. Miquel cited the locality as "Iwajagama," but the handwriting on the label of this specimen can be read as "Iwajajama." The locality name "Iwajagama" is considered to be an error for "Iwajajama" [probably Iwaya-yama in northwest Nagasaki]. Although we were unable to determine why Miquel cited the collector as Siebold, it is reasonable to regard this specimen as one cited by Miquel.

No. 908.118-1367 has two labels. One is Miquel's with the handwritten "Siebold" and

the other has the handwritten "*Hedysarum (Lespedeza) racemosa*[sic], Th. fl. Var. flor. alb." It is uncertain whose handwriting is the latter, but we presume it to be written by Siebold. Miquel wrote: "Siebold *D. racemosi* var. *albifloram* dixit, an itaque, nisi schedularum error, flores albi?" We could not find the specimen with the handwritten "*D. racemosum* var. *albiflorum*." This second sheet might correspond with Miquel's description. It consists of three branches, the center one with another label with "Sitzyma." We consider this label to be original. As mentioned above to be able to read the handwriting and to determine the correct locality name is sometimes difficult. We believe "Sitzyma" might be read as "Sitzigama" by Miquel, as cited in his original description. This sheet corresponds with the specimens Miquel cited as "in Sitzigama legit SIEBOLD." "Sitzyma" may be "Shichiyama" and "Sitzigama" may be "Shichigama," but we are unaware of a locality with either name.

No. 908.118-1377 has Miquel's label with the handwritten "*Lespedeza cyrtobotrya* Miq.?" and "Sieb," and another label with "Sitzyma October." "Sieb" is considered to be an abbreviation for "Siebold," indicating that Miquel recognized this specimen as one collected by Siebold. Although Miquel cited "Sitzigama" and questioningly wrote "*Lespedeza cyrtobotrya* Miq.?", we consider this to be the specimen cited as "in Sitzigama legit SIEBOLD."

No. 908.118-1387 has Miquel's label with the handwritten "Oldham" by Miquel and another label with the handwritten "*Lespedeza virgata?* DC. Japan Oldham 1861." Though this sheet has no precise locality, Miquel cited Oldham's collection as "prope Nangasaki OLDHAM (*L. virgata?* Oliver *in shed.*)."
We recognize this as specimen cited by Miquel.

The remaining three sheets (nos. 944.161-355, 944.161-356, and 951.342-263) also

have Miquel's label with the handwritten "Siebold," indicating that Miquel recognized these specimens to be collected by Siebold. One of them (no. 944.161-355) has another label with the handwritten "*Hedysarum Octob.*" Miquel cited Siebold's collections from "Prope Iwajagama et in Sitzigama." These specimens have no detailed locality information, so we do not regard them as syntypes.

In conclusion, we confirm the existence of four syntypes of *L. cyrtobotrya*. We examined them in detail and determined that one of them is *L. cyrtobotrya*, one is a mixture of *L. cyrtobotrya* and *L. homoloba*, and two are not *L. cyrtobotrya*. No. 908.118-1365 is *L. cyrtobotrya*. No. 908.118-1367 consists of one branch of *L. cyrtobotrya* (left side) and two branches of *L. homoloba* (center and right side). No. 908.118-1377 is *L. homoloba*. No. 908.118-1387 is *L. ×cyrtobuergeri* S.Akiyama & H.Ohba, which is a hybrid between *L. buergeri* and *L. cyrtobotrya*. To prevent confusion, we designate the specimen (no. 908.118-1365) as the lectotype of *L. cyrtobotrya*. It is clear that *L. homoloba* was collected in Japan before Nakai (1923) published it as a new species. Miquel confused *L. homoloba* with *L. cyrtobotrya* and could not distinguish *L. ×cyrtobuergeri* from *L. cyrtobotrya*.

We examined the specimen, Oldham 329 (no. 908.118-2838), preserved in Leiden and verified that it consists of a sterile branch with leaves of *L. thunbergii*. Miquel did not mention the relation of this specimen with *L. cyrtobotrya* and we do not know why Miquel cited this specimen in note under *L. cyrtobotrya*.

Lectotype: Japan. Iwajajama (ut 'Iwajajama') (Buerger s. n., L, no. 908.118-1365).

[Fig. 1]

Syntypes: Japan. Sitzyma (ut 'Sitzigama') (Siebold s.n., L, nos. 908.118-1367, 908.118-1377); Nangasaki [now Nagasaki] (no locality name on the specimen) (Oldham

s. n., L, no. 908.118-1387).

Japanese name: Maruba-hagi. Mitsuba-hagi and Hagi-modoki on the label may have been formerly as local names.

***Lespedeza sieboldii* Miq.**

Miquel (1867) cited the following specimens, "Habemus sp. Thunbergianum a VAN ROYEN *Hedysarum racemosum* THUNB. cum dubio inscriptum. — Legerunt SIEBOLD, BUERGER et TEXTOR; prope Nangasaki OLDHAM n. 332 foliolis paullo minoribus, et sp. *parvifolium* et *pauciflorum* videtur eius n. 333 ex Archipelago Coreano."

We found 13 sheets with a label with the heading "Herb. Lugd.-Batav." and the handwritten "*Lespedeza Sieboldii*" by Miquel (Table 1).

No. 908.118-2353 has Miquel's label with the handwritten "Thunberg?" and additional handwriting on the sheet "Thunberg" on the upper left side and "*Hedysarum racemosum* Thunb. japon. 285" on the lower left side, "*Desmod. racemosum* DC. 115" is on the lower right down and "ê Japan ..." is in the upper right. This specimen is regarded as the one cited as "Habemus sp. Thunbergianum a VAN ROYEN *Hedysarum racemosum* THUNB. cum dubio inscriptum."

Six sheets (nos. 908.118-2346, 908.118-2356, 908.118-2363, 908.118-2371, 908.118-2381, 908.118-2391) with Miquel's handwritten "Siebold" were recognized as specimens collected by Siebold. Four of them (nos. 908.118-2346, 908.118-2356, 908.118-2381, 908.118-2391) have Siebold's original labels, and three have labels with "Hagi" and "Koshikuwa" written in Japanese. These six sheets correspond to the specimens cited by Miquel as "Legerunt SIEBOLD."

No. 908.118-2392 which has a label with "Buerger" written by Miquel corresponds with the specimen cited by Miquel "Legerunt... BUERGER."

Three sheets (nos. 908.118-2341, 908.118-

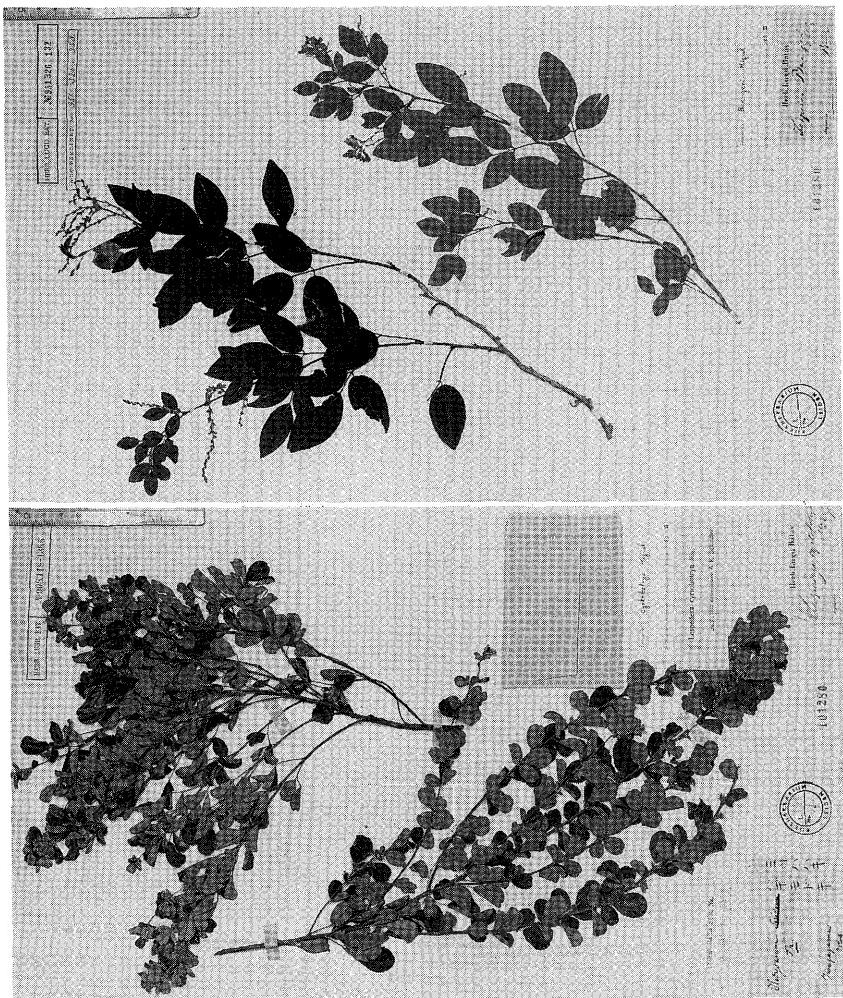


Fig. 1. Top: Lectotype of *Lespedeza buergeri* Miq. (Buerger s. n., L, no. 951.326 132).
Bottom: Lectotype of *L. cyrtobotrya* Miq. (Buerger s. n., L, no. 908.118-1365).

2351, 908.118-2361) have Miquel's label with the handwritten "Textor," indicating that Miquel recognized these specimens to be collected by Textor. These specimens correspond with the specimens cited by Miquel; "Legerunt... TEXTOR."

One sheet (without no.) has Miquel's label with "Oldham" handwritten on it and another label with the handwritten "332 *Lespedeza* Oldham Japan & Korean Arch. coll. 1862-63." This sheet consists of four branches.

Compared with other specimens determined by Miquel as *L. sieboldii*, these branches have smaller leaves. Although this specimen lacks an indication of collection locality, we believe it to be the specimen cited by Miquel as "prope Nangasaki OLDHAM n. 332 foliolis paullo minoribus." The reason Miquel cited it as "prope Nangasaki" is uncertain. We recognized it as a syntype.

No. 908.119-583 has Miquel's label with the handwritten "*Lespedeza a...L. Sieboldi?*"

and another label with the handwritten “333 *Lespedeza* Oldham Japan & Korean Arch. coll. 1862–63.” This sheet consists of one branch with small leaves and few flowers. From the information provided, “Japan & Korean Arch,” there is no way to determine if the specimen is from Japan or Korea. The collection number 333 and the features of the plant agree with Miquel’s citation and description “sp. *parvifolium* et *pauciflorum* *videtur eius n.* 333 ex *Archipelago Coreano*.” As mentioned below, this plant is *L. maximowiczii*, which is widespread in Korea, but is not on Kyushu proper (in Japan only on Tsushima Island). Although we have no way to determine the place of collection, Miquel might have had additional information on the locality.

In conclusion, we recognize 13 syntypes of *L. sieboldii* and examined all of them in detail. Among the 13 syntypes 8 are *L. thunbergii* (= *L. sieboldii*), 3 are *L. buergeri*, 1 is a mixture of *L. thunbergii* and *L. japonica*, and 1 is *L. maximowiczii*.

The specimen collected by Thunberg? (no. 908.118-2353), the six collected by Siebold (nos. 908.118-2381, 908.118-2363, 908.118-2371, 908.118-2346, 908.118-2356, 908.118-2391) and one collected by Buerger (no. 908.118-2392) are confirmed to be *Lespedeza thunbergii*, of which *L. sieboldii* is recognized as a synonym (Nakai 1927, Akiyama 1988).

Three specimens collected by Textor (nos. 908.118-2341, 908.118-2351, 908.118-2361) are *L. buergeri*. The apex of the leaves of *L. buergeri* is usually acute, and since the leaves resemble those of *L. thunbergii* in shape, we suspect that Miquel sometimes confused *L. thunbergii* with *L. buergeri*.

One specimen collected by Oldham (no. 332) (without a Leiden accession number) consists of four branches. Two branches on the left side are *L. thunbergii* and the other two are *L. formosa* or *L. japonica*. Ohba and Akiyama determined the left two as *L.*

formosa in 1983 (see identification label on the sheet). It is difficult to distinguish cultivated *L. japonica* ‘Nipponica’ (a cultivar with red-purple flowers) and *L. japonica* ‘Japonica’ (a cultivar with white flowers) from wild *L. formosa* (Akiyama, 1988). Since *Lespedeza formosa* (var. *velutina*) is very rare in Nagasaki (Akiyama, 1988), it is better to treat these specimens as *L. japonica*. We believe that Miquel also sometimes confused *L. thunbergii* with *L. japonica*.

One specimen collected by Oldham (no. 333) (no. 908.119-583) is not *L. thunbergii* but *L. maximowiczii* (Akiyama 1988).

It appears clear that Miquel sometimes did not distinguish *L. thunbergii* from *L. japonica* and confused *L. thunbergii* with *L. buergeri* and *L. maximowiczii*.

To prevent confusion the lectotype should be selected from the eight specimens identified as *L. thunbergii*. We agree with Akiyama’s lectotypification (Akiyama 1988). This specimen (no. 908.118-2391) has good flowers, the original label has much information “*Hedysarum racemosum* Th. Varieta culta *Koshi Kuwa **Fagi Japonia Siebold...,” and it was collected by Siebold himself.

Lectotype: Japan. (Siebold s. n., L, no. 908.118-2391). [Fig. 2]

Syntypes: Japan (Siebold s. n., L, nos. 908.118-2346, 908.118-2356, 908.118-2363, 908.118-2371, 908.118-2381); (Thunberg? s. n., L, no. 908.118-2353); (Buerger s. n., L, no. 908.118-2392); (Textor s. n., L, nos. 908.118-2341, 908.118-2351, 908.118-2361); (Oldham 332, L, without accession number); (Oldham 333, L, no. 908.119-583).

[Figs. 2–5]

Japanese name: Miyagino-hagi. “Hagi” and “Koshikuwa” are on the label of the specimen. “Hagi” is now used as a general name for plants of sect. Macrolespedeza. “Koshikuwa” may have been used locally in the past.



Fig. 2. Top: Lectotype of *Lespedeza sieboldii* Miq. (Siebold s. n., L, no. 908.118-2391).
Bottom: Syntype of *L. sieboldii* Miq. (Thunberg? s. n., L, no. 908.118-2353).

Lespedeza oldhamii Miq.

Miquel (1867) cited only one specimen in the original description, "OLDHAM (n. 335) in Iaponia vel Archipelago Coreano contermino detexit."

There is one specimen (no. 908.118-1398) collected in "Japan & Korea Arch" by Oldham (no. 335) and determined by Miquel as "*Lespedeza Oldhami* Miq." This was regarded as the holotype by Akiyama (1988)

without question. *Lespedeza oldhamii* is now treated as a synonym of *L. buergeri* (Ohwi 1953, Akiyama 1988).

Holotype: Japan or Korea. (Oldham 335, L, no. 908.118-1398).

Japanese name: Maruba-ki-hagi.

Lespedeza bicolor Turcz.

f. *microphylla* Miq.

Miquel (1867) cited one specimen in the



Fig. 3. Syntypes of *Lespedeza sieboldii* Miq. Top: Siebold s. n., L, no. 908.118-2356.
Bottom: Buerger s. n., L, no. 908.118-2392.

original description, “*L. racemosa* SIEB. herb. qui etiam var. cultam albifloram in sched. statuit.” We did not find that specimen in Leiden, nor could we find any specimens determined as *Lespedeza bicolor* f. *microphylla* by Miquel. We cannot designate the type of *L. bicolor* f. *microphylla*.

There are 32 sheets determined by Miquel as “*Lespedeza bicolor* Turcz.” “*Lespedeza*

bicolor Turcz. ? var. *parvifolia*,” “*Lespedeza bicolor* Turcz. *parvifolia*,” or “*Lespedeza bicolor* Turcz. var.” From the original description, the plant on which the name *Lespedeza bicolor* f. *microphylla* was based, “var. cultam albifloram,” was apparently a cultivated plant with white flowers. At that time, and also now, the most common white flowered *Lespedeza* in Japanese gardens is *L.*



Fig. 4. Syntypes of *Lespedeza sieboldii* Miq. Top: Textor s. n., L, no. 908.118-2361.
Bottom: Oldham 332, L, without accession number.

'Japonica' (Japanese name: Shira-hagi or Shirohana-hagi). When we examined the 32 sheets, we did not find a specimen corresponding to the original description by Miquel.

Six sheets are *L. bicolor* and seven sheets contain both *L. bicolor* and other species. Fifteen sheets are *L. japonica* 'Nipponica' (or *L. japonica* 'Japonica' if white flowered) or *L. formosa*; two sheets contain *L. japonica*

'Nipponica' (or *L. japonica* 'Japonica') and *L. cyrtobotrya*; one is *L. cyrtobotrya*, and one is a mix of *L. cyrtobotrya* and *Desmodium*. It is clear that Miquel did not recognize *L. japonica* or *L. formosa*, and he sometimes confused *L. bicolor* with *L. cyrtobotrya*.

var. **pauciflora** Miq.

Miquel (1867) cited one specimen in the



Fig. 5. Top: Syntype of *Lespedeza sieboldii* Miq. (Oldham 333, L, no. 908.119-583).
Bottom: Holotype of *L. bicolor* Turcz. var. *pauciflora* Miq. (Oldham 330, L, no. 908.118-1055).

original description, "prope Nagasaki, oldham n. 330." There is one sheet of OLDHAM no. 330 (no. 908.118-1055) in Leiden. The sheet has a label with the handwritten "*Lespedeza bicolor* Turcz.? var. *pauciflora* Miq." by Miquel. This specimen agrees with the description by Miquel. Although Miquel determined it as *Lespedeza bicolor* Turcz. var. *pauciflora* Miq. with a

question mark, we recognize it as the holotype. There are two more sheets (nos. 908.118-1066, 908.118-1087) also with the handwritten "*Lespedeza bicolor* Turcz. ? var. *pauciflora* Miq." by Miquel. Those specimens were collected by Pierot, so are not types.

Holotype: Japan. Nagasaki [Nangasaki] (Oldham 330, L, no. 908.118-1055).[Fig. 5]

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References

Akiyama S. 1988. A revision of the genus *Lespedeza*

秋山 忍^a, 大場秀章^b: Miquel により記載されたハギ属ヤマハギ節（マメ科）の種および種内分類群のタイプ

Miquel (1867) は、主に Siebold らにより採集された標本にもとづいて、ハギ属ヤマハギ節の4種 (*Lespedeza buergeri*, *L. cyrtobotrya*, *L. sieboldii*, *L. oldhamii*) 2種内分類群 (*L. bicolor* f. *microphylla*, *L. bicolor* var. *pauciflora*) の記載を行った。しかしこれらの分類群についてタイプの指定がなされていない。一部の種については既にレクトタイプの指定が行われたが (Akiyama 1988), 当時はライデンに収蔵されるすべての標本を検討すること

section *Macrolespedeza* (Leguminosae). The University Museum, the University of Tokyo, Bulletin no. 33: 1–170, pls. 1–27 (simultaneously published by University of Tokyo Press, Tokyo).

- Miquel F. A. G. 1867. *Lespedeza* Michx. Ann. Mus. Lugduno-Batavi 3: 47–50 (Prol. Fl. Jap.: 235–238). Nakai T. 1923. Notulae ad plantas Japoniae et Coreae. Bot. Mag. Tokyo 37: 69–82.
— 1927. *Lespedeza* of Japan & Korea. Bull. For. Exp. Stat. Chosen 6: 1–101. Ohwi J. 1953. *Lespedeza*. In: Flora of Japan, pp. 677–680. Shibundo, Tokyo (in Japanese).

ができなかったため、レクトタイプの指定を行うことができなかつた分類群が残されていた。筆者の一人（大場）は2001年にライデン標本館において、関係する標本を検討する機会を得た。重要な標本は借用して再検討した。ここでは、Miquel が原記載に引用した標本の正体を明らかにし、レクトタイプの指定を行った。

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